

**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC 7 C12N5/06**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

**IPC 7 C12N**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

**EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS****C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KALE S ET AL: "THREE-DIMENSIONAL CELLULAR DEVELOPMENT IS ESSENTIAL FOR EX VIVO FORMATION OF HUMAN BONE" NATURE BIOTECHNOLOGY, NATURE PUBLISHING, US, vol. 18, September 2000 (2000-09), pages 954-958, XP000996174 ISSN: 1087-0156  the whole document ----- -/-	1-30, 32-34, 42-44, 46,51, 54,55, 58-60, 62-64, 68-85, 88, 92-96, 149-160

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the International search report
29 December 2004	05/01/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Chavanne, F

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 95/30742 A (BIOSURFACE TECH INC) 16 November 1995 (1995-11-16)</p> <p>abstract page 20 - page 29 page 30, line 12 - page 31, line 7 page 32, line 28 - page 33, line 31 page 36, line 30 - page 40 examples 3,4</p> <p>-----</p>	<p>1-30, 32-34, 42-48, 51-60, 62-86, 88-112, 114-141, 149-160</p>
X	<p>KUSHIDA A, ET AL.: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, vol. 45, no. 5, 1999, pages 355-362, XP001204072</p> <p>abstract page 355, column 2 - page 356, column 1, paragraph 1 page 356, column 2, paragraph 2 page 357, column 2, paragraph 2 figure 1 page 359 page 360, column 1, paragraph 2 page 360, column 2, paragraph 2 - page 361, column 1, paragraph 1</p> <p>-----</p>	<p>1, 3-12, 14-23, 26-30, 34-36, 42, 43, 48, 49, 51-53, 62-64, 74-79, 81-85</p>
X	<p>WO 95/33821 A (ADVANCED TISSUE SCIENCES INC) 14 December 1995 (1995-12-14)</p> <p>abstract page 15, paragraph 2 - page 17, paragraph 1 page 18, paragraph 7 page 19, paragraph 2 - page 30, paragraph 2 page 45, paragraph 1 - page 46, paragraph 1</p> <p>-----</p> <p>-/-</p>	<p>1-16, 18-30, 32-41, 43-86, 88-112, 114-160</p>

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2004/011401

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/091979 A1 (ESCHENHAGEN THOMAS) 15 May 2003 (2003-05-15)  abstract paragraphs '0001!, '0008!, '0014!, '0016!, '0031!, '0083! - '0085! example 2 -----	1-6, 16, 18-31, 74-77, 85-87, 91-94, 96, 149, 150, 154, 156, 157

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/011401

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 9530742	A	16-11-1995		AU 2435495 A AU 2468995 A WO 9530383 A1 WO 9530742 A1 US 5723331 A US 5786217 A		29-11-1995 29-11-1995 16-11-1995 16-11-1995 03-03-1998 28-07-1998
WO 9533821	A	14-12-1995		US 5902741 A AU 689605 B2 AU 2769695 A CA 2192064 A1 EP 0812351 A1 JP 2002502226 T NZ 288467 A WO 9533821 A1 US 5962325 A US 6140039 A US 6022743 A US 5863531 A		11-05-1999 02-04-1998 04-01-1996 14-12-1995 17-12-1997 22-01-2002 28-10-1998 14-12-1995 05-10-1999 31-10-2000 08-02-2000 26-01-1999
US 2003091979	A1	15-05-2003		DE 10003521 A1 AU 3734501 A CA 2398084 A1 WO 0155297 A2 EP 1250416 A2 JP 2004500093 T		09-08-2001 07-08-2001 02-08-2001 02-08-2001 23-10-2002 08-01-2004

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/011401

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the International application and necessary to the claimed Invention, the International search was carried out on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the International application as filed
    - filed together with the International application in computer readable form
    - furnished subsequently to this Authority for the purpose of search
2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP2004/011401

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 97–141 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.